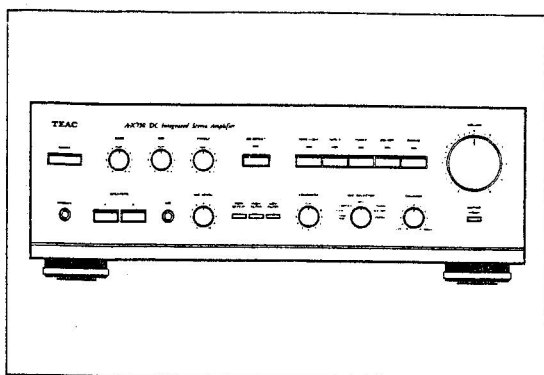



TEAC[®]



SERVICE MANUAL

A-X750

DC Integrated Stereo Amplifier

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

CAUTION

△ Parts marked with this sign are safety critical components. They must always be replaced with identical components—refer to the appropriate parts list and ensure exact replacement.

NOTE:

As regards the resistors and capacitors, refer to the circuit diagrams and the PCB ass'y drawings included in this brochure.

SPECIFICATIONS

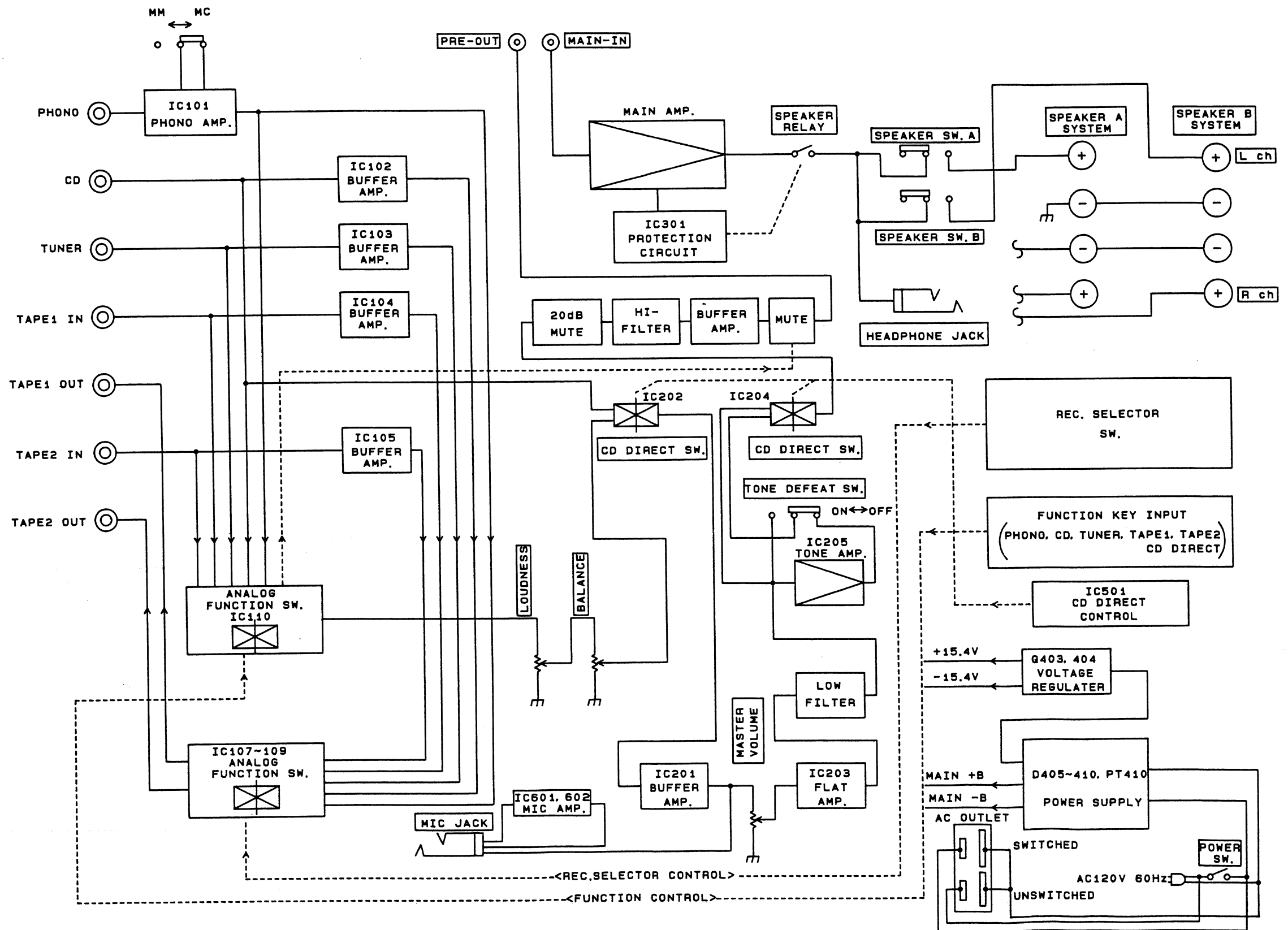
Output Power	*75 watts per channel minimum RMS, both channels driven into 8 ohms from 40 Hz to 20 kHz with no more than 0.05% total harmonic distortion. 90W + 90W (8 ohms DIN, 1 kHz) 97W + 97W (8 ohms Dynamic Power) 114W + 114W (6 ohms Dynamic Power)
Input Sensitivity/Impedance	PHONO: MM; 2.5 mV/47 kohms MC; 250 μ V/100 ohms CD/VCR, TAPE1/DAT, TAPE2, TUNER: 150 mV/30 kohms MIC: 0.6 mV/47 kohms
Frequency Response	CD/VCR, TAPE1/DAT, TAPE2, TUNER: 5 Hz – 40 kHz –3 dB (Line In to SP Out) PHONO: 20 Hz – 20 kHz \pm 0.5 dB (RIAA)
Total Harmonic Distortion	0.05%
Damping Factor	30 (1W, 50 Hz)
Output Level/Impedance	TAPE1/DAT, TAPE2: 142 mV/1 kohm
Signal-to-Noise Ratio (IHF A Network)	PHONO: MM; 80 dB MC; 60 dB CD/VCR, TAPE1/DAT, TAPE2, TUNER: 96 dB
Tone Control	Bass: \pm 10 dB at 100 Hz Mid: \pm 6 dB at 1 kHz Treble: \pm 10 dB at 10 kHz
Loudness Control	–15/–24/–17 dB at 100 Hz/1 kHz/10 kHz
Filter	High Filter: –3 dB at 10 kHz Low Filter: –3 dB at 100 Hz
Muting	–20 dB
Power Requirements	115/230V AC, 50/60 Hz (General Export) 120V AC, 60 Hz (USA/Canada) 220V AC, 50 Hz (Europe) 240V AC, 50 Hz (UK/Australia)
Power Consumption	425W
Dimensions (WxHxD)	435 x 152 x 325 mm (17-1/8" x 6" x 12-13/16")
Weight (net)	9.0 kg (19.81 lbs)

* Measured pursuant to Federal Trade Commission's Trade Regulation Rule on Power Output Claim for Amplifier in U.S.A.

**Improvements may result in specification or feature changing without notice.

BLOCK DIAGRAMS

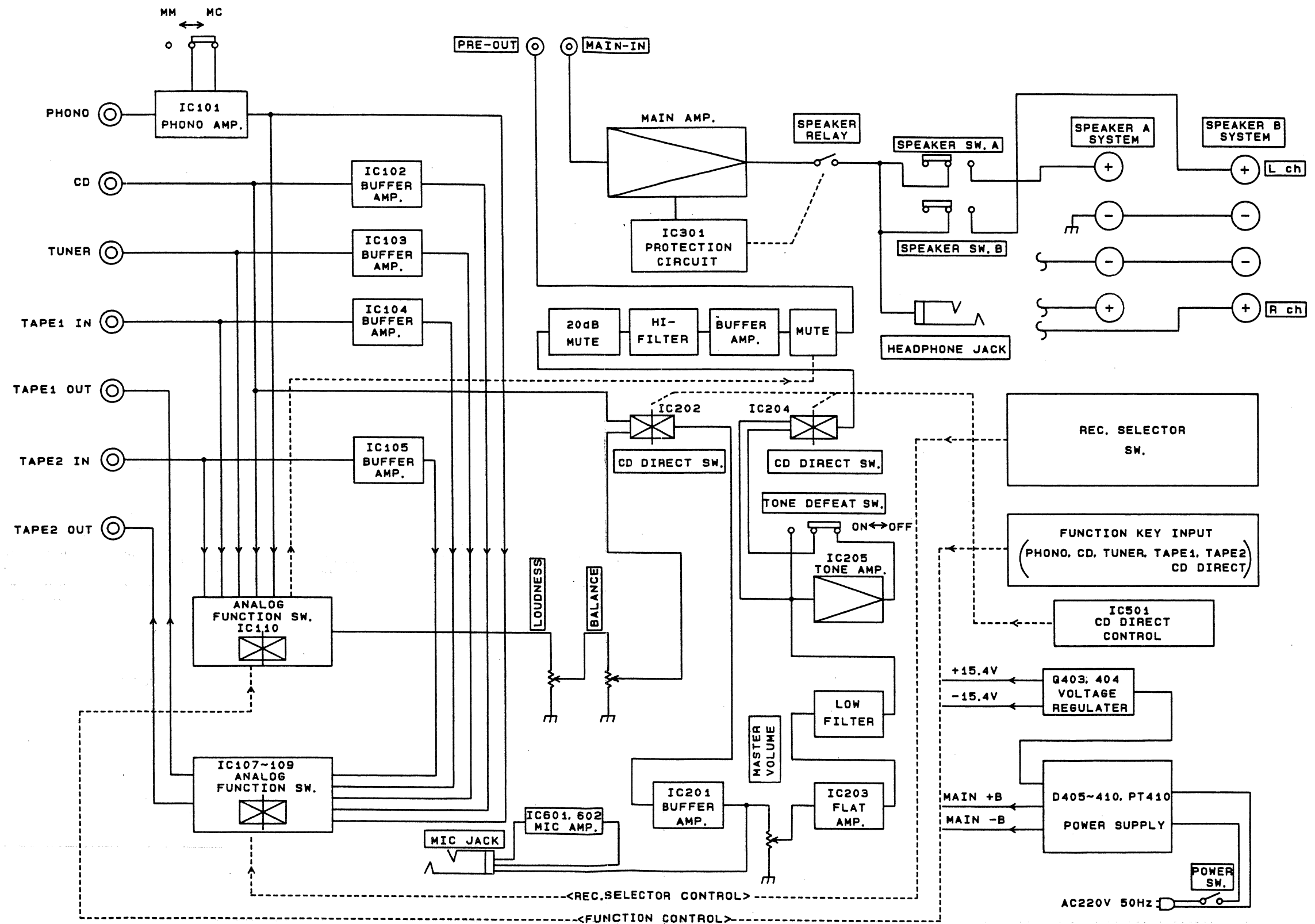
Canada



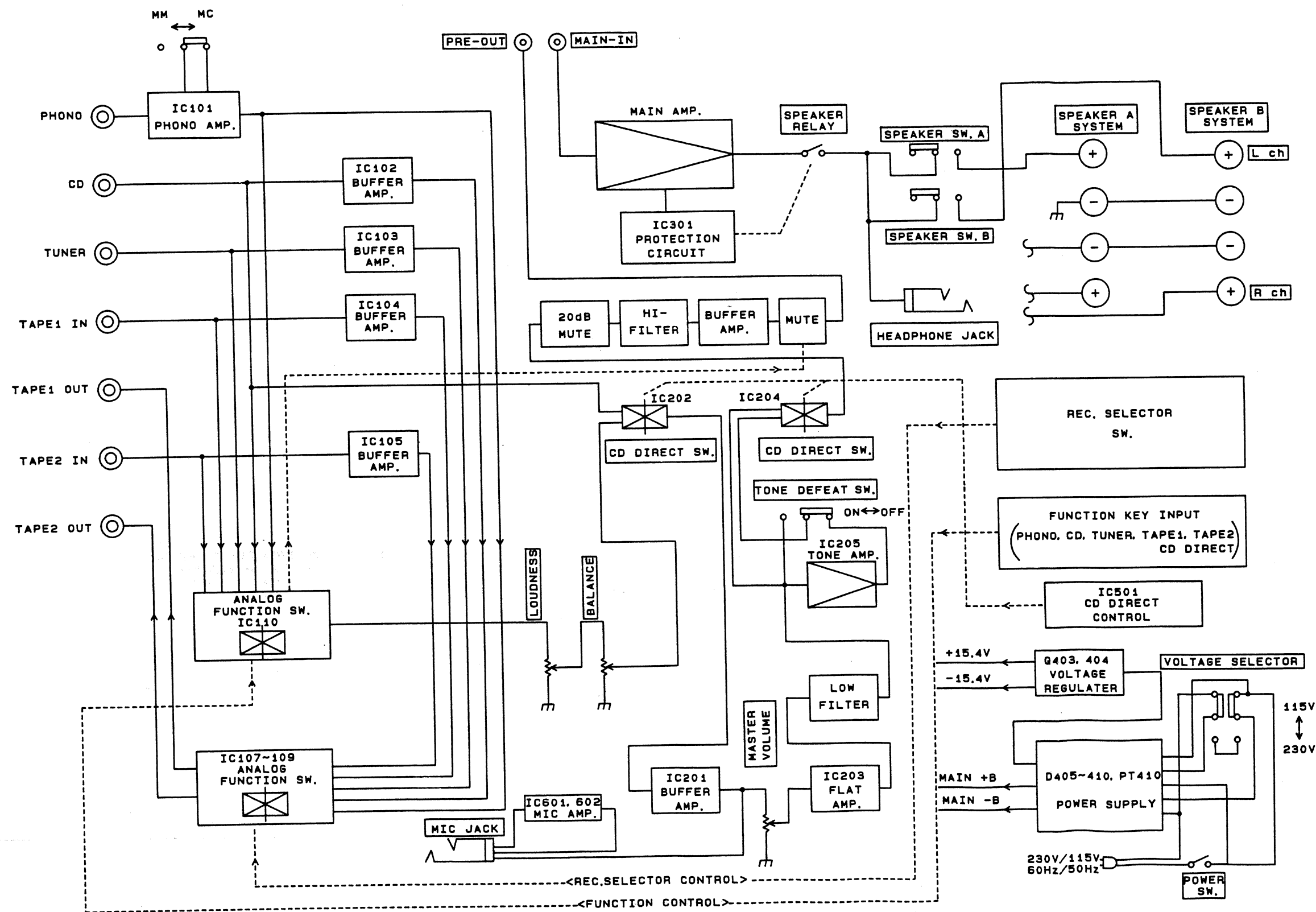
A-X750

A-X750

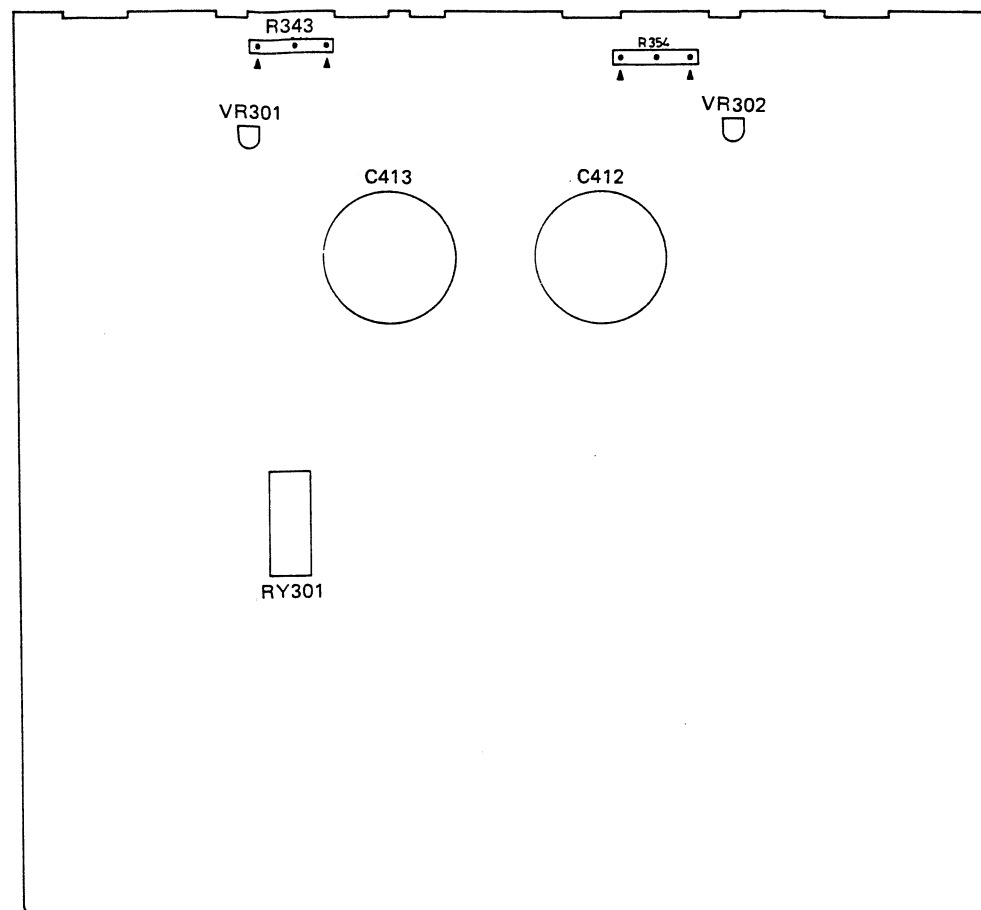
Europe, U,K



General Export



ADJUSTMENT AND CHECKS



AMPLIFIER SECTION

Condition

Power requirements: 120V AC, 60 Hz (Canada)
 220V AC, 50 Hz (Europe)
 115V/230V AC, 60 Hz/50 Hz
 (General Export)
 240V AC, 50 Hz (UK)

Input: No signal

Output load: 8 ohms

● Idling current

1. Set the Power switch to ON and wait for 3 minutes for preheating.
2. Connect a DVM (Digital Voltage Meter) across R343 (0.22 ohms x 2 = 0.44 ohms).
3. Adjust VR301 (L CH) so that the DVM reads 7 ± 0.1 mV.
4. Connect the DVM across R344 (0.22 ohms x 2 = 0.44 ohms).
5. Adjust VR302 (R CH) so that the DVM reads 7 ± 0.1 mV.

EXPLODED VIEW

REF. NO.	PARTS NO.	DESCRIPTION
1M 1	*9A02213400	FRONT PANEL
1M 3	*9A02213500	FRONT BASE
1M 6	9A02102300	TACT BUTTON, 5
1M 7	9A02102300	TACT BUTTON
1M12	9A02213600	PUSH BUTTON
1M14	9A02102400	PUSH BUTTON
1M15	9A02102400	PUSH BUTTON
1M16	*9A02102500	LED LENS, 5
1M17	*9A02102500	LED LENS
1M19	*9A02213700	CABINET
1M21	*9A02212200	REAR PANEL [C]
	*9A02213800	REAR PANEL [E]
	*9A02212600	REAR PANEL [UK]
	*9A02212800	REAR PANEL [GE]
1M23	*9A01201300	BOTTOM BOARD
1M25	*9A01522600	TRANSFORMER CHASSIS
2M 1	9A02213900	VR KNOB (46)
2M 2	9A01046100	VR KNOB (16)
2M 3	5800752300	POWER BUTTON B
2M 4	*5720175500	TEAC EMBLEM
2M 5	*9A02214300	FOOT ASSY
3M 1	*9A01202500	SIDE CHASSIS
3M 2	*9A01202600	CENTER CHSSIS
3M 4	*9A01203800	HEAT SINK METAL-FITTING F
3M 5	*9A01203900	HEAT SINK METAL-FITTING C
3M 6	*9A01204000	HEAT SINK METAL-FITTING R
3M 8	*9A01204100	PCB METAL-FITTING
3M10	*9A01202800	HEAT SINK
3M14	*9A01203300	FUSE COVER [E,UK,GE]
3M16	*9A01204500	INSULATION COVER [E,UK,GE]
3M24	*9A01204400	TRANSFORMER METAL-FITTING
3M27	*9A02114200	SPACER
3M28	*9A01523900	CABIMAT
3M30	*9A01519100	LED SPACER
5M 1	*9A00313700	TAP SCREW TBB+26X08-B [GE]
5M 6	*9A00315700	TAP SCREW TPM+30X08-Y
5M 8-M12	*9A00315700	TAP SCREW TPM+30X08-Y
5M13,M14	*9A00314000	TAP SCREW TPM+30X08-B
5M16	*9A00314000	TAP SCREW TPM+30X08-B
5M19	*9A00314000	TAP SCREW TPM+30X08-B
5M21-M25	*9A00315800	TAP SCREW TSB+30X06-Y
5M26	*9A00315800	TAP SCREW TSB+30X06-Y [E]
5M28-M30	*9A00315800	TAP SCREW TSB+30X06-Y
6M 1,M 2	*9A00315800	TAP SCREW TSB+30X06-Y
6M 6-M11	*9A00326900	TAP SCREW TSB+30X06-B
6M13,M14	*9A00629500	TAP SCREW TSB+30X08-Y
6M16	*9A00389600	TAP SCREW TSB+30X08-B
6M26	*9A00315900	TAP SCREW TSC+30X08-Y
6M27	*9A01207900	TAP SCREW TSB+40X08-Y
6M29	*9A00334700	TAP SCREW TSB+40X08-B
7M 1	*9A00391300	TAP SCREW TSB+40X10-Y
7M 7	*9A01205500	NYLON PUSH RIVET [E,UK,GE]
7M14	*9A00317300	TAP SCREW TBB+30X08-Y [E]
7M15-M17	*9A00317300	TAP SCREW TBB+30X08-Y
7M20	*9A01276500	TAP SCREW TBC+30X12-Y

REF. NO.	PARTS NO.	DESCRIPTION
6E28	*9A02214600	MAIN PCB
8E27	*9A02216500	LOUDNESS VOLUME PCB
10E28	*9A02221000	TONE CONTROL PCB
11E29	*9A02220700	FUNCTION SELECTOR PCB
12E29	*9A02217900	SPEAKER SELECTOR PCB
13E 9	*9A02220500	MAIN VOLUME PCB
13E17	*9A02218500	20 DE MUTE PCB
13E27	*9A02217600	SPEAKER TERMINAL PCB
14E 1	*9A01204700	LUG
14E 3	*9A01204700	LUG
14E 5	*9A01204700	LUG
14E12	*9A02215900	POWER SWITCH PCB
14E19	*9A02216300	POWER TRANS PCB
14E20	Δ 9A02110700	SWITCH [GE]
14E21	Δ*9A01625700	AC OUTLET [C]
	Δ*9A02110900	AC OUTLET [GE]
14E22	Δ*9A02114500	LINE CORD [C]
	Δ*9A02114700	LINE CORD [E]
	Δ*9A02115200	LINE CORD [UK]
	Δ*9A02115400	LINE CORD [GE]
14E23	*9A00325300	CORD STOPPER [C,E,GE]
	Δ*9A02111700	CORD STOPPER [UK]
14E26	*9A01208800	GROUND TERMINAL
14E30	*9A02217500	LUG (TUNING)
Q315,316	9A01210800	TRANSISTOR 2SC1846-R
Q321,322	9A01211500	TRANSISTOR 2SD2052-S,P
Q323,324	9A01210500	TRANSISTOR 2SB1361-S,P
Q331	9A01210800	TRANSISTOR 2SC1846-R
PT401	Δ 9A02211000	POWER TRANSFORMER [C]
	Δ 9A02214500	POWER TRANSFORMER [E]
	Δ 9A02212500	POWER TRANSFORMER [UK]
	Δ 9A02212700	POWER TRANSFORMER [GE]

INCLUDED ACCESSORIES

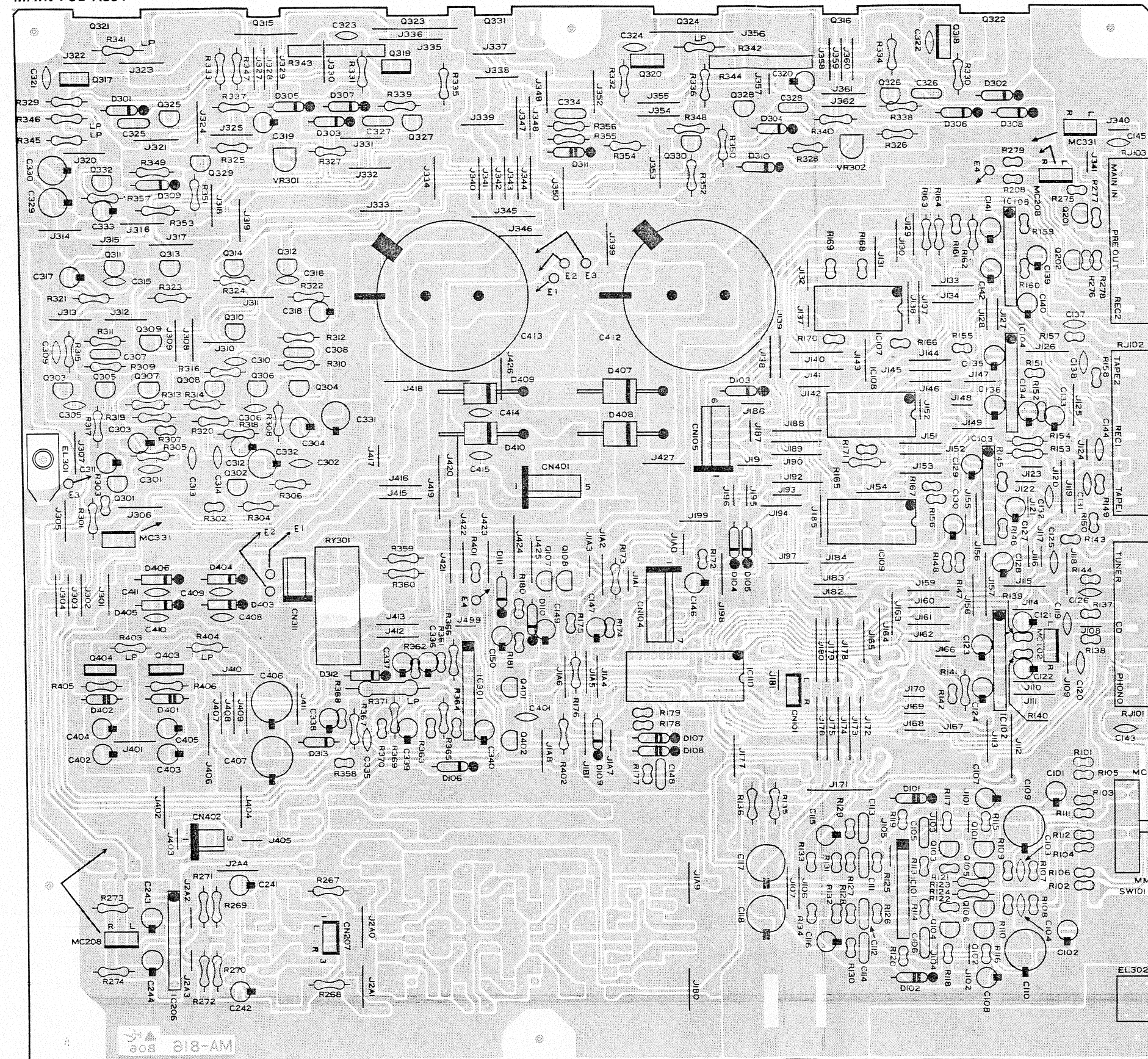
REF. NO.	PARTS NO.	DESCRIPTION
	*9A01844800	OWNER'S MANUAL(M) [A-X750]
	*9A02211900	SOLDER-PLATED WIRE [C]
	*9A02221500	SOLDER-PLATED WR [E,UK,GE]
	*9A02212000	SOLDER-PLATED WIRE [C]
	*9A02221600	SOLDER-PLATED WR [E,UK,GE]
	*9A02111100	SOLDER-PLATED WIRE [GE]
	*9A02111200	SOLDER-PLATED WIRE [GE]
	*9A02111300	SOLDER-PLATED WIRE [GE]
	*9A02111400	SOLDER-PLATED WIRE [GE]
	*9A02115600	SOLDER PLATED WIRE [GE]

[C]:CANADA [E]:EUROPE [UK]:U.K. [GE]:GENERAL EXPORT

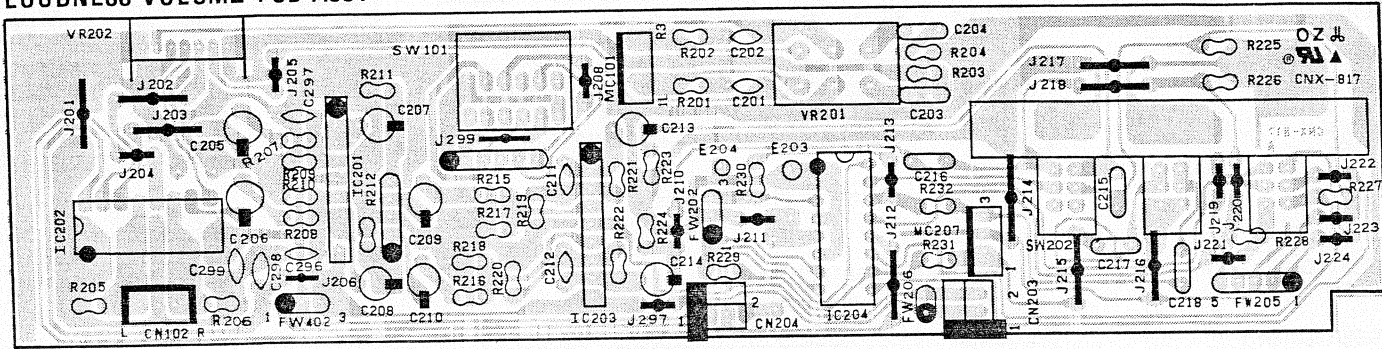
Parts marked with *require longer delivery time.

A-X750

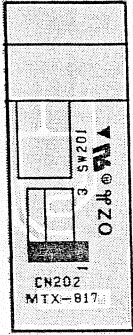
MAIN PCB ASSY



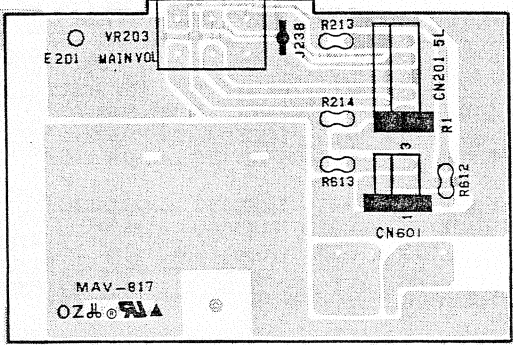
LOUDNESS VOLUME PCB ASSY



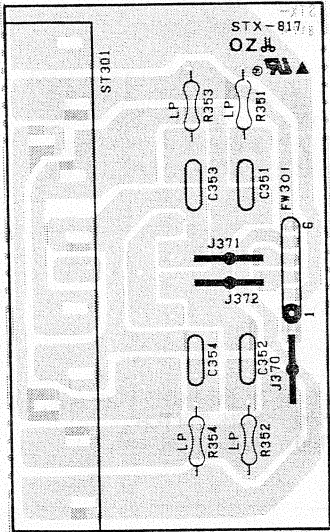
20 DB MUTE PCB ASSY



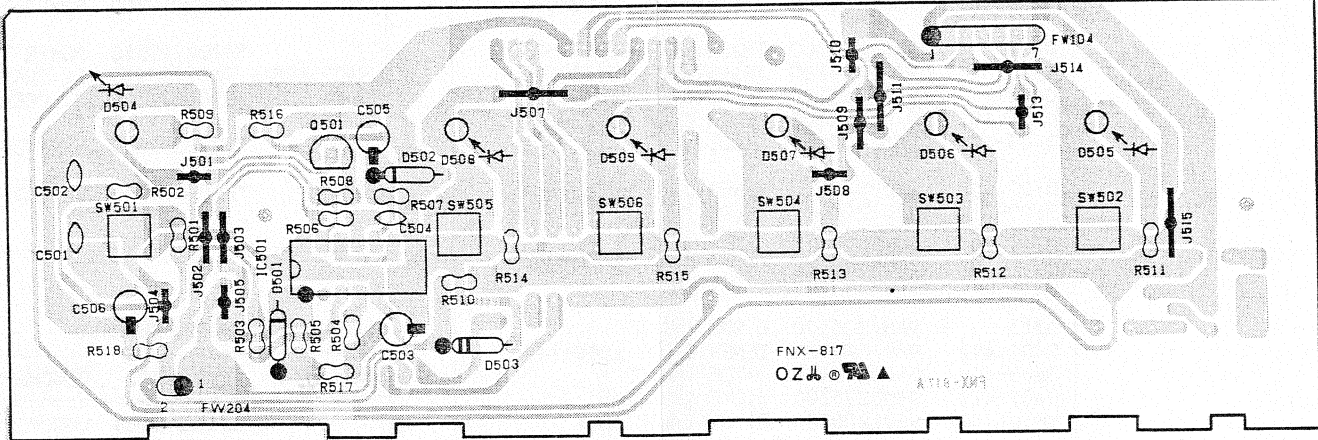
MAIN VOLUME PCB ASSY



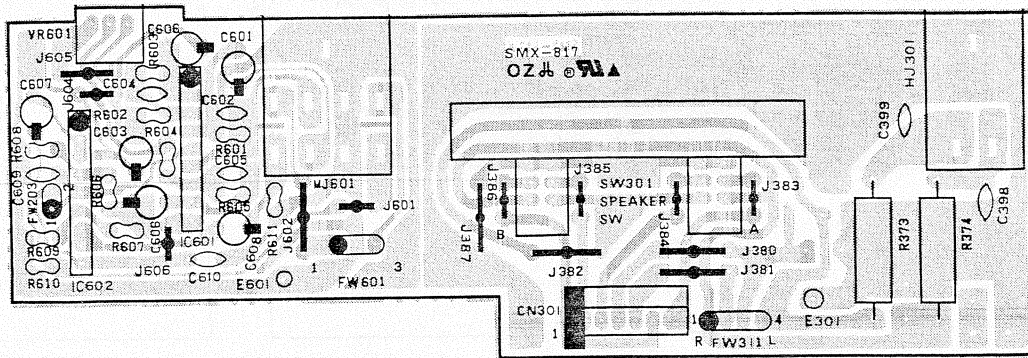
SPEAKER TERMINAL PCB ASSY



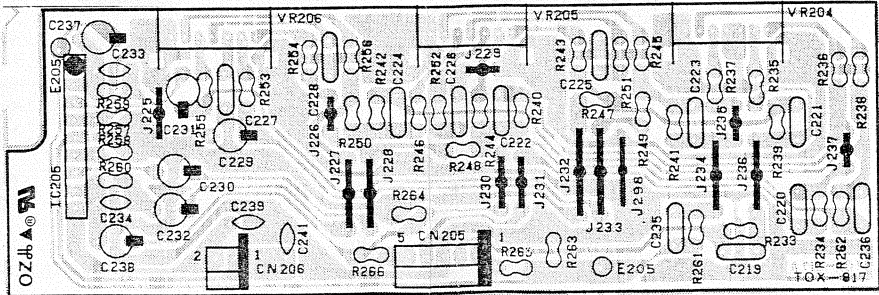
FUNCTION SELECTOR PCB ASSY



SPEAKER SELECTOR PCB ASSY



TONE CONTROL PCB ASSY



MAIN PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02219100	MAIN PCB ASSY [C,UK,GE]
	*9A02219110	MAIN PCB ASSY [E]
IC101-105	9A01200300	IC NJM4565SB
IC107-109	9A02103000	IC TC9214P
IC110	9A01198700	IC LC7818
IC206	9A01200300	IC NJM4565SB
IC301	9A01207500	IC TA7317P
Q101-104	9A02214700	TRANSISTOR 2SC3329-GR
Q105,106	9A02121300	TRANSISTOR 2SK381-D,E
Q107,401	9A01205300	TRANSISTOR RN-1204
Q108,402	9A02102900	TRANSISTOR RN2207
Q201,202	9A00308100	TRANSISTOR 2SC2878-A,B
Q303-310	9A00657000	TRANSISTOR 2SC2240-GR
Q311,312	9A01209900	TRANSISTOR 2SA1145-O,Y
Q313,314	9A01211000	TRANSISTOR 2SC2705-O,Y
Q317,318	9A01211200	TRANSISTOR 2SC3421-O,Y
Q319,320	9A01210100	TRANSISTOR 2SA1358-O,Y
Q325,326	9A00592300	TRANSISTOR 2SC1815-GR
Q327,328	9A01648200	TRANSISTOR 2SA1015-GR
Q329,330	9A00657000	TRANSISTOR 2SC2240-GR
Q332	9A00657100	TRANSISTOR 2SA970-GR
Q403	9A02214800	TRANSISTOR 2SB632K-E
Q404	9A02214900	TRANSISTOR 2SD612K-E
D101,102	9A00598100	ZENER DIODE ZD50-062
D103-106	9A01209500	DIODE 1N4148
D107,108	9A00577100	ZENER DIODE ZD50-074
D109-111	9A01209500	DIODE 1N4148
D301-310	9A01209500	DIODE 1N4148
D311	9A00598100	ZENER DIODE ZD50-062
D312	9A00275400	DIODE 1N4002
D313	9A01209500	DIODE 1N4148
D401,402	9A01647100	ZENER DIODE ZD50-147
D403-406	9A00275400	DIODE 1N4002
D407-410	9A00275300	DIODE 1N5402-F
VR301,302	9A01206800	R. SEMI-VARIABLE
R329-332	9A02103300	R. FLAME PROOF FR25ST220J
R341,342	9A01195700	R. FLAME PROOF FR50ST221J
R343,344	9A01199000	R. CEMENT MPC725R22KX2LF
R345,346	9A02103400	R. FLAME PROOF FR50ST100J
R403,404	9A02103600	R. FLAME PROOF FR25ST220J
L101,102	9A02215300	INDUCTOR
L103,104	9A00595200	INDUCTOR (1MH)
RY301	9A01193200	RELAY
SW101	9A02215400	SLIDE SWITCH
RJ101-103	9A01208500	RCA JACK 6P
CN101,207	9A01193600	CONNECTOR
CN104	9A01651600	CONNECTOR
CN105	9A01213200	CONNECTOR
CN311	9A01213000	CONNECTOR
CN401	9A01213100	CONNECTOR
CN402	9A01212900	CONNECTOR
MC102	*9A02215600	MICRO SOCKET ASSY
MC208	*9A02215700	MICRO SOCKET ASSY
MC331	*9A02215800	MICRO SOCKET ASSY
E 1- 3	*9A02103700	SOLDER-PLATED WIRE
E 4	*9A02215500	SOLDER-PLATED WIRE

[C]:CANADA [E]:EUROPE [UK]:U.K. [GE]:GENERAL EXPORT

Parts marked with *require longer delivery time.

POWER SWITCH PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02219200	POWER SW PCB ASSY [C,GE]
	*9A02219210	POWER SW PCB ASSY [E,UK]
SW401	Δ 9A01206900	POWER SWITCH
C416	Δ 9A01208300	C. METAL FILM YE103
FU401	Δ 9A01520600	FUSE [C,GE]
FU401	9A02216100	FUSE [E,UK]
W420	*9A02107700	CABLE ASSY [C,GE]
W421	*9A02107800	CABLE ASSY [C,GE]
W422	*9A02107900	CABLE ASSY [C,GE]
	*9A00279200	FUSE HOLDER [E,UK]
	*9A01626600	FUSE HOLDER [C,GE]

POWER TRANS PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02219300	POWER TRANS PCB ASSY [C,UK,GE]
	*9A02219310	POWER TRANS PCB ASSY [E]
R407,408	Δ 9A02106900	R. FLAME PROOF FR25ST2R2J
C963	Δ 9A00276000	C. CERAMIC HE90SJYF223Z
FW401	*9A02212100	5-CONDUCTOR, SHIELDED CABLE [C,UK,GE]
FW401	*9A02216400	5-LEAD, FLAT CABLE [E]

LOUDNESS VOLUME PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02219400	LOUDNESS VOLUME PCB ASSY [C,UK,GE]
	*9A02219410	LOUDNESS VOL. PCB ASSY [E]
IC201,203	9A01200300	IC NJM4565SB
IC202,204	9A02103800	IC TC9215P
VR201	9A02216700	ROTARY POTENTIOMETER
VR202	9A02117100	ROTARY POTENTIOMETER
SW101	9A02216800	ROTARY SWITCH
SW202	9A02216900	PUSH SWITCH
MC101	*9A02215600	MICRO SOCKET ASSY
MC207	*9A02217400	MICRO SOCKET ASSY
FW103	*9A02217000	6-LEAD, FLAT CABLE
FW201	*9A02116300	5-LEAD, FLAT CABLE
FW202	*9A02217100	3-LEAD, FLAT CABLE
FW205	*9A02217200	5-LEAD, FLAT CABLE
FW206	*9A02217300	2-LEAD, FLAT CABLE
FW402	*9A02115900	3-LEAD, FLAT CABLE

SPEAKER TERMINAL PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02219500	SPEAKER TERMINAL PCB ASSY
R351-354	9A02217700	R. FLAME PROOF FR25ST100J
ST301	9A02217800	SOCKET 8P (S.P)
FW301	*9A00587000	6-LEAD FLAT CABLE

SPEAKER SELECTOR PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02219600	SPEAKER SELECTOR PCB ASSY [C,UK,GE]
	*9A02219610	SPEAKER SELE. PCB ASSY [E]
IC601,602	9A01200300	IC NJM4565SB
VR601	9A02218000	ROTARY POTENTIOMETER
R373,374	9A01524500	R. METAL OXIDE
SW301	9A02218100	PUSH SWITCH
HJ301	9A01208400	HEAD PHONE JACK
MJ601	9A02117700	MIC JACK
CN301	9A01213200	CONNECTOR
E301	*9A02211700	SOLDER-PLATED WIRE
E601	*9A02211800	SOLDER-PLATED WIRE
FW203	*9A02218200	2-LEAD, FLAT CABLE
FW311	*9A02218300	4-LEAD, FLAT CABLE
FW601	*9A02218400	3-LEAD, FLAT CABLE

20 DB MUTE PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02219700	20 DB MUTE PCB ASSY
SW201	9A02218600	PUSH SWITCH
CN202	9A01212900	CONNECTOR

MAIN VOLUME PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02219800	MAIN VOLUME PCB ASSY [C,UK,GE]
	*9A02219810	MAIN VOLUME PCB ASSY [E]
VR203	9A02107300	ROTARY POTENTIOMETER
CN201	9A01213100	CONNECTOR
CN601	9A01212900	CONNECTOR
E201	*9A02211700	SOLDER-PLATED WR [C,UK,GE]
E201	*9A02211800	SOLDER-PLATED WIRE [E]
E202	*9A02211800	SOLDER-PLATED WR [C,UK,GE]
E290	*9A02220600	SOLDER-PLATED WIRE

[C]:CANADA [E]:EUROPE [UK]:U.K. [GE]:GENERAL EXPORT

Parts marked with *require longer delivery time.

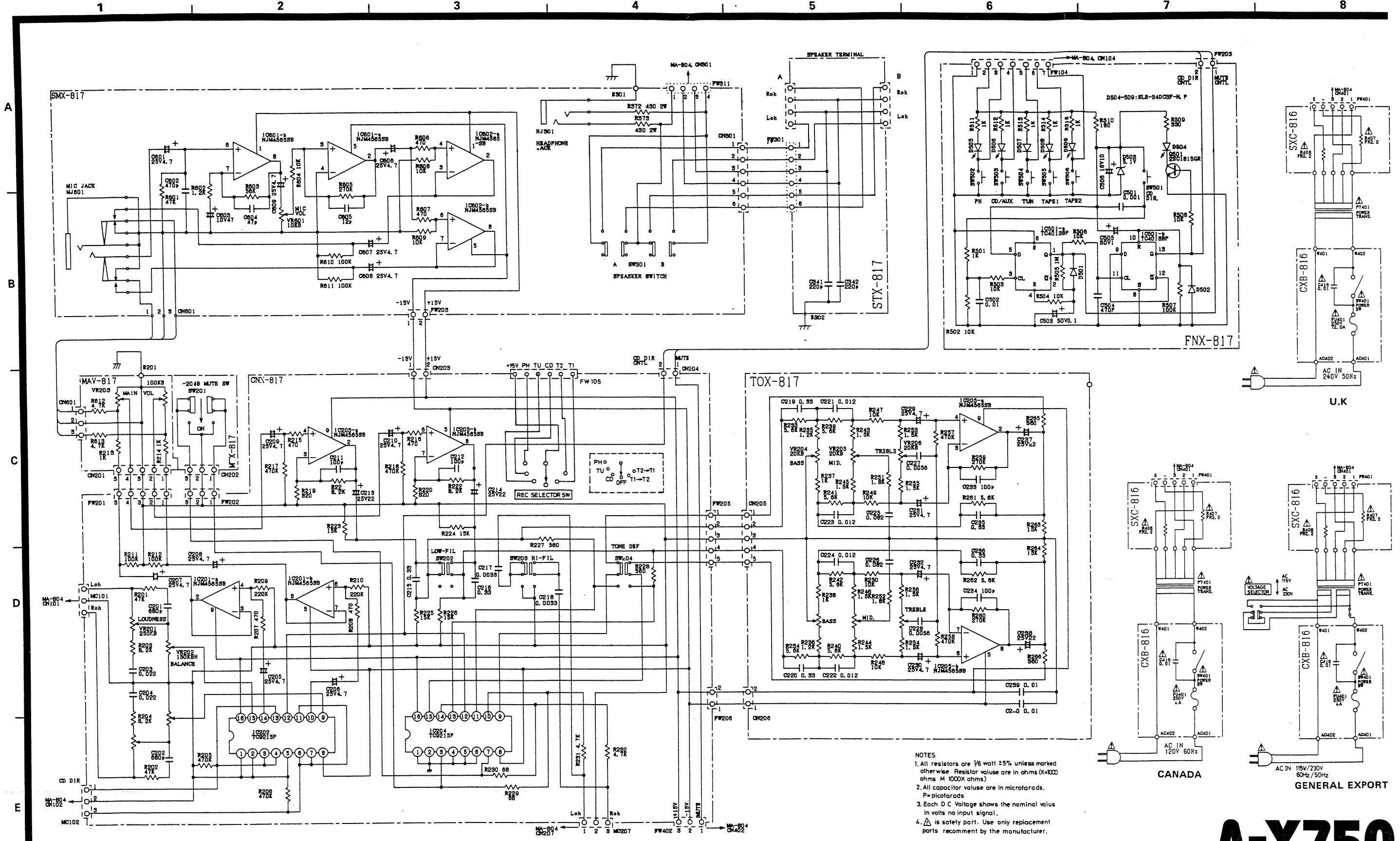
FUNCTION SELECTOR PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02219900	FUNCTION SELECTOR PCB ASSY
IC501	9A01207600	IC TC4013BP
Q501	9A00592300	TRANSISTOR 2SC1815-GR
D501,502	9A01209500	DIODE 1N4148
D503	9A00577100	ZENER DIODE ZD50-074
D504-509	9A01206600	LED
SW501-506	9A01206700	TACT SWITCH
FW104	*9A02220900	7-LEAD, FLAT CABLE
FW204	*9A02218200	2-LEAD, FLAT CABLE

TONE CONTROL PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9A02220000	TONE CTL PCB ASSY [C,UK,GE]
	*9A02220010	TONE CONTROL PCB ASSY [E]
IC205	9A01200300	IC NJM4565SB
VR204-206	9A02221200	ROTARY POTENTIOMETER
CN205	9A01213100	CONNECTOR
CN206	9A02104200	CONNECTOR
1W11	*9A02221300	SOLDER-PLATED WIRE

TEAC SCHEMATIC DIAGRAM A-X750 (Canada, General Export, U,K)

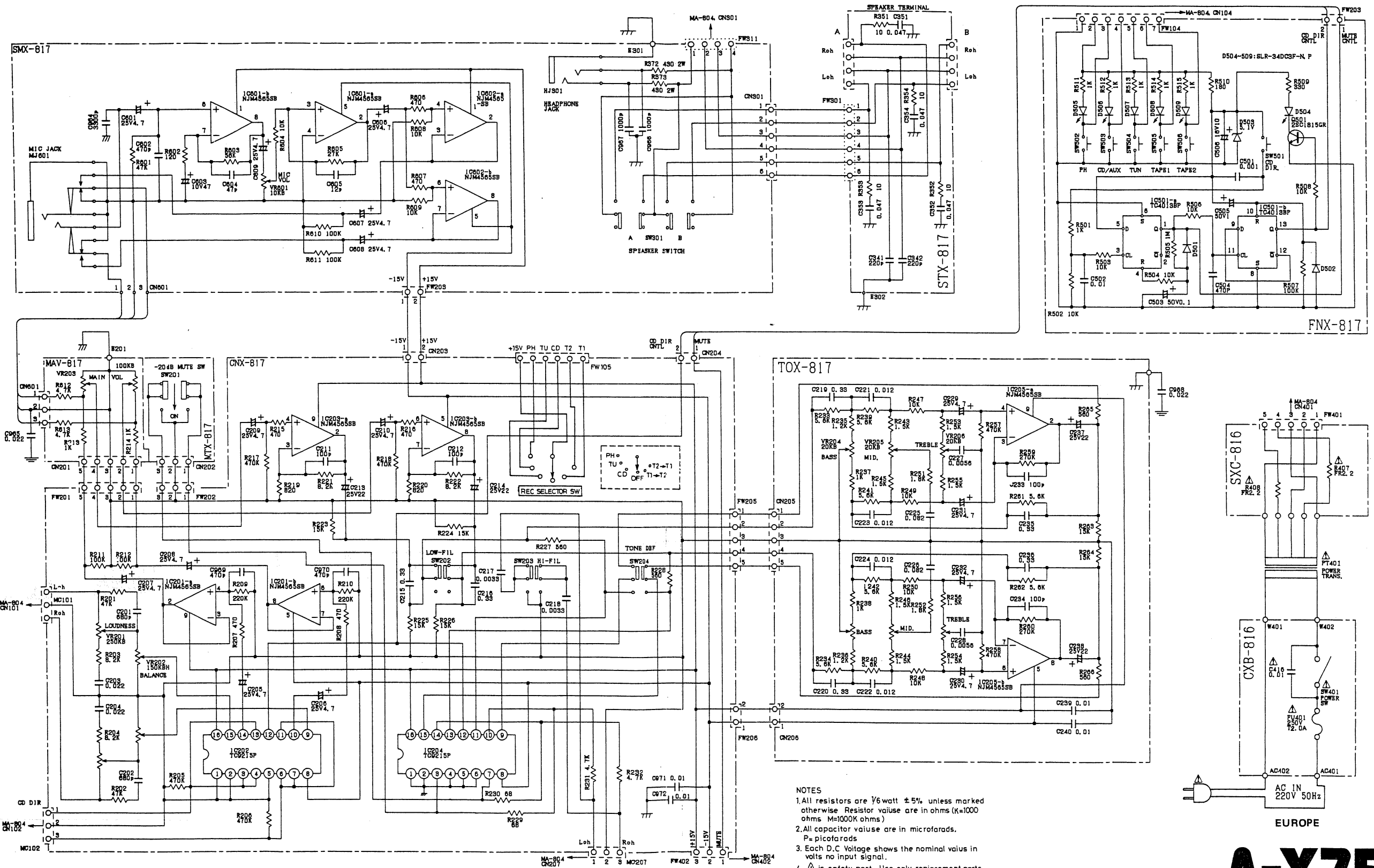


- NOTES
1. All resistors are 1/8 watt $\pm 5\%$ unless marked otherwise. Resistor values are in ohms (K=1000 ohms, M=1000K ohms).
 2. All capacitor values are in microfarads. P=picofarads.
 3. Each D.C. Voltage shows the nominal value in volts no input signal.
 4. Δ is safety part. Use only replacement parts recommended by the manufacturer.

A-X750 DC Integrated Stereo Amplifier

1st Issue; February 1990

TEAC SCHEMATIC DIAGRAM A-X750 (Europe)

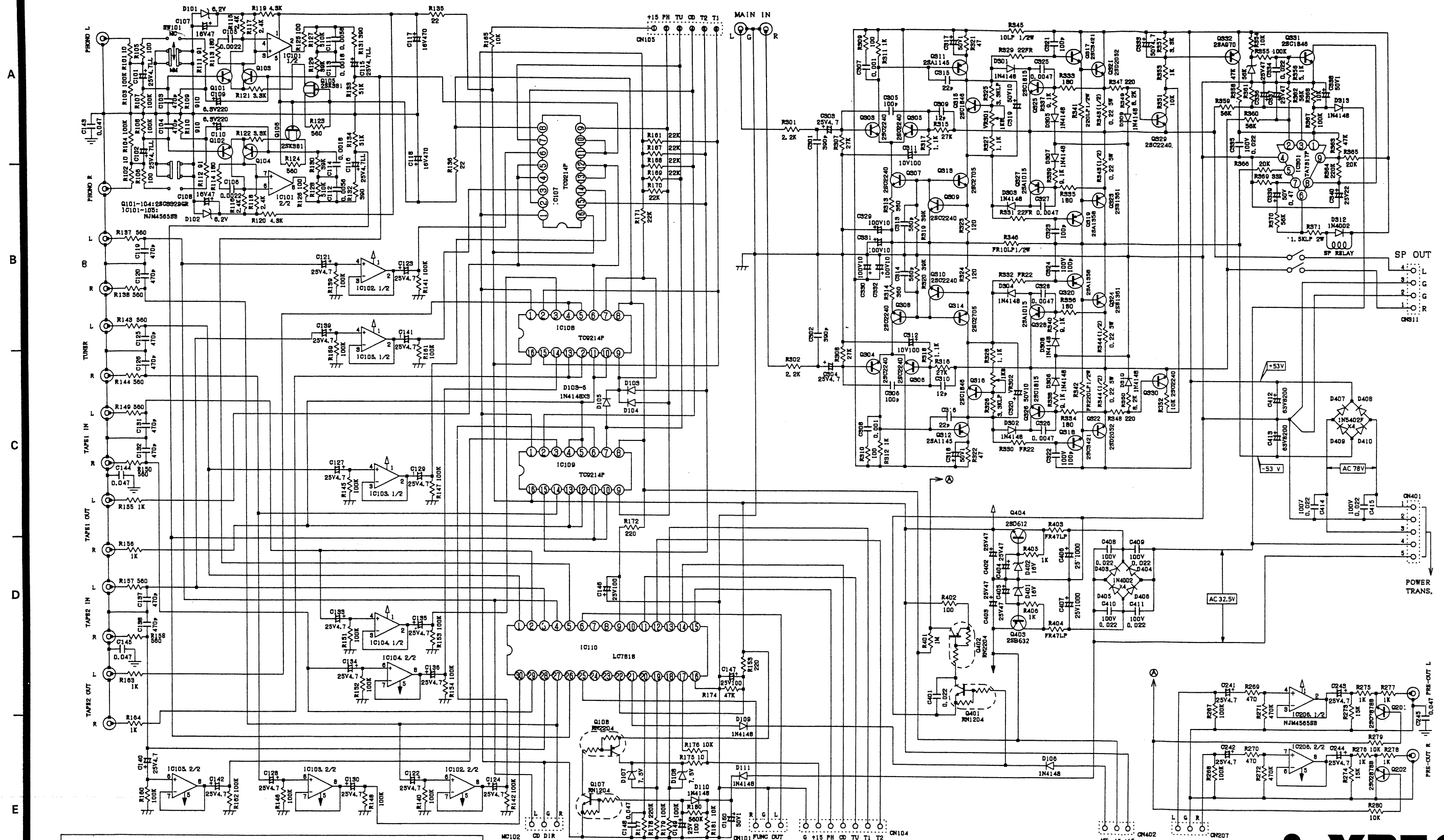


A-X750

DC Integrated Stereo Amplifier

1st Issue; February 1990

TEAC SCHEMATIC DIAGRAM A-X750 (Canada, General Export, U,K)



INSTRUCTIONS FOR SERVICE PERSONNEL

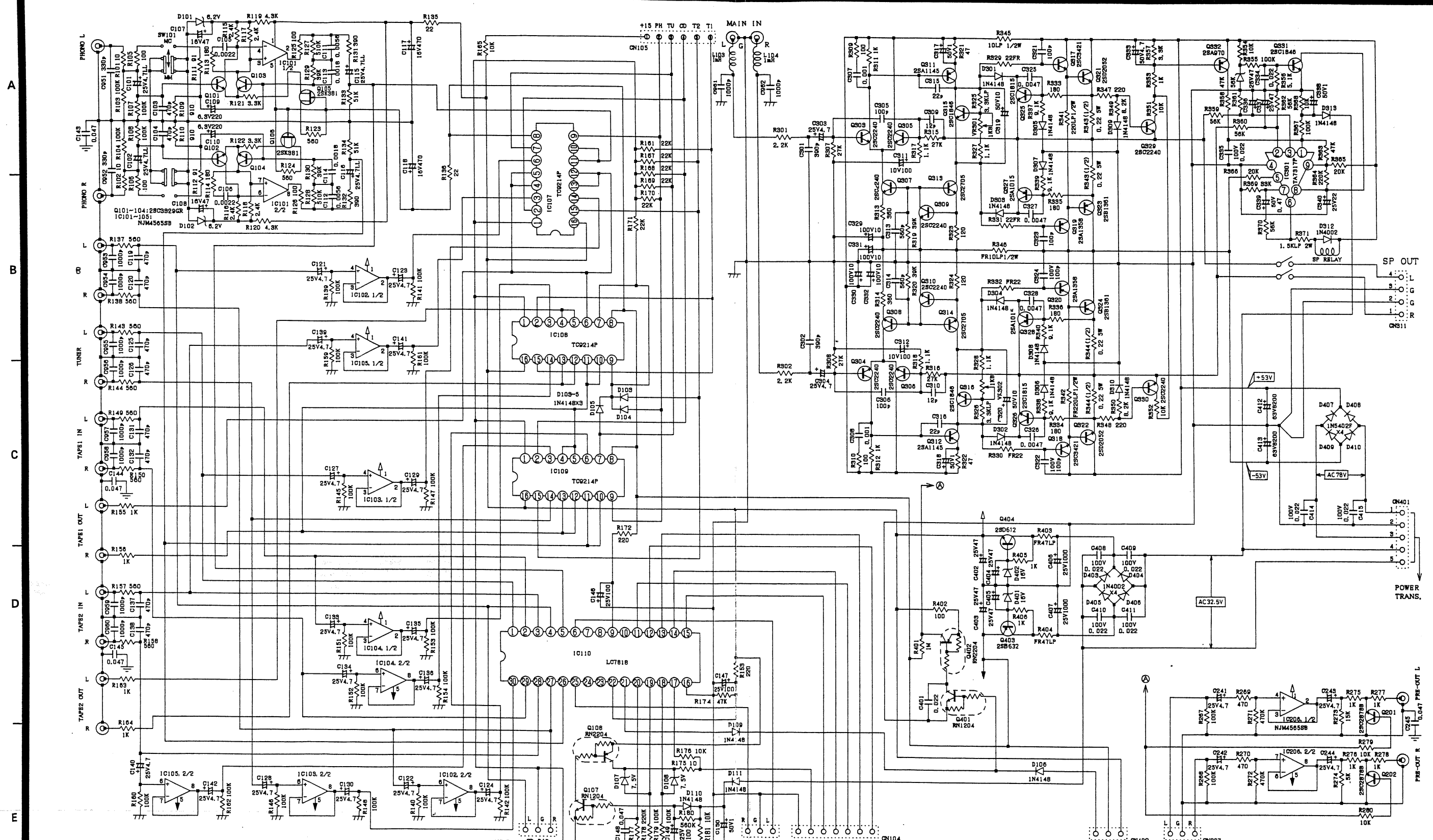
BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

A-X750

DC Integrated Stereo Amplifier

1st Issue; February 1990

TEAC SCHEMATIC DIAGRAM A-X750 (Europe)



A-X750

DC Integrated Stereo Amplifier

1st Issue; February 1990